DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation "a second component part that is attached to the first component part" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 22-25, 4-9, 13-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation in "2)" is not in the specification and/or drawings. The limitation "flexible but substantially incompressible" is also not in the specification and/or drawings.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4-6 and 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Unclear what applicant means by projections or a projections in line 3 of claims 4 and 13.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 22-25, 4-9 and 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nathan (US. 2,615,741).

Nathan discloses a component assembly having a first component part (e.g. 17) having a groove (e.g. groove in 17), a second component part (e.g. 16) part that is attached to the first component part, a sealing member (e.g. figure 3 shown the sealing member) that is disposed within the groove so as to provide a seal between the first and second component (figure 2), the sealing member comprises an elongated body (e.g. see figure below) that is flexible but substantially incompressible (e.g. the seal is formed of similar material as claimed by applicant, rubber or elastomeric material) and that has a solid cross-section (e.g. elongated body has a solid cross-section and extends annularly), the elongated body having upper and lower surface (e.g. figure below), at least one of which serves to form the seal and a lateral surface (e.g. lateral surface between the upper and lower surface), a plurality of discrete protrusions projecting from the lateral surface (e.g. each of 15a), each of the protrusion comprises a generally arcuate, relatively short length of material that is anchored at opposite ends thereof to the lateral surface (e.g. each end of 15a that is anchored to the lateral surface), with portions of the short length of material located between the ends thereof being spaced from the lateral surface (e.g. each protrusion is hollow and hence spaced from the lateral surface) and the space between the lateral surface and each of the short lengths of material is open or unobstructed so as to form a lead through (e.g. this is the case since the space is not obstructed).

Regarding claims 4-9 and 13-19: Each of the protrusion has an upper delimitation surface and a lower delimitation surface (e.g. upper surface of 15 which adjacent to the upper surface of the elongated body) and projections of the upper and lower delimitation surface of the protrusions in parallel width of the elongated body are located between the upper surface and lower surfaces of the elongated body (e.g. the protrusion are between the upper surface and

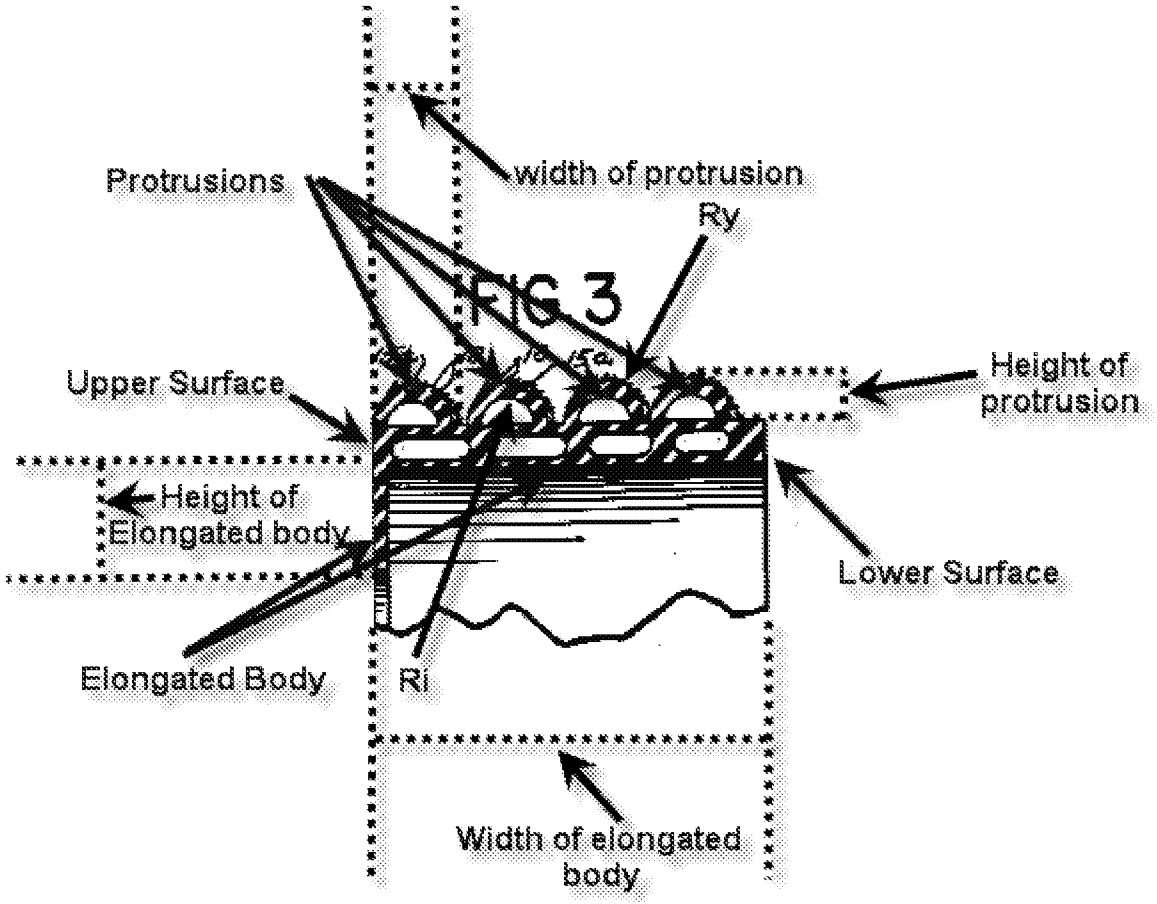
lower surface of the elongated body). The protrusion each exhibit an extension in height-direction which is smaller than the extension in height of the elongated body (e.g. see figure below).

Surface perpendiculars of the upper, lower, and lateral surfaces of the elongated body each extend in a continuous or non-changing direction, whereas the surface perpendicular of an outer side surface of each of the protrusions facing away from the elongated body, changes direction with position along the length of the protrusion so that the scalar product of the outer side surface perpendicular and a vector oriented along the longitudinal direction of the elongated body in the vicinity of a given protrusion changes sign on from one end of the protrusion to the other (e.g. this is the case since the protrusion have a structure that is semi-circular).

Each of the protrusions exhibits an outer side surface facing away from the elongated body and an inner side surface facing towards the elongated body (e.g. surfaces having Ry and Ri), the inner side surface is curved and exhibits a maximum radius of curvature Ri and the outer side surface is curved and exhibits a maximum radius of curvature Ry and the maximum radius of curvature of the outer side surface is larger than the maximum radius of curvature of the inner side surface (e.g. this would be the case since the curve on the inner surface forms a smaller circle than the curve on the outer surface).

The sealing strip is designed with a sufficient number of protrusions (e.g. at least four protrusions). The groove and the elongated body are designed as endless loops (e.g. this is the case since the elongated body and the groove are annular in form). The elongated body and the groove are designed with a longitudinal direction varying in three dimensions (e.g. this is the case as shown in figures).

With regard to method limitation: Such that the protrusion can be compressed or collapsed toward the lateral surface by pinching it in its middle to facilitate 1) insertion of the sealing member into the groove and 2) retention of the sealing member therein by virtue of the protrusion springing back against a sidewall of the groove (e.g. [E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process). In order to enable self-supporting installation in the groove



Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nathan in view of Horvath (US. 3,643,968). Alternate rejection if applicant claims that the structure is square shape or other shapes.

Nathan discloses the invention substantially as claimed above but fails to disclose that the groove and the sealing member are of a square shape. Horvath discloses a sealing gasket that is square and is placed in a square joint (e.g. figures 1-4, 7) and a sealing gasket that is circular or annular that is placed in a circular joint (e.g. figures 5-6). It would have been obvious to one having ordinary skilled in the art at the time of the invention to have the groove and elongated body of Nathan to be in a square configuration as taught by Horvath, since having a gasket to be annular or square is art equivalent.

Response to Arguments

10. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Furthermore limitations of the claims are clearly shown in figure above of Nathan. No claims are indicated to be allowable.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is also noted that claims limitations are taught by reference of Horvath and Sumitomo and Nathan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tomas Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./
Primary Examiner, Art Unit 3676

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